WASHINGTON STATE DEPARTMENT OF ECOLOGY
POST OFFICE BOX 47600
OLYMPIA, WASHINGTON 98504-7600

IN THE MATTER OF:	]	
	]	
Sierra Pacific Industries	]	**NO. PSD 05-04**
Skagit Lumber Maufacturing Facility	]	
Skagit County, Washington	]	**FINAL APPROVAL**
Sierra Pacific Industries	]	**OF PSD APPLICATION**
P.O. Box 496028	]	
Redding, California 96049	]	

Pursuant to the United States Environmental Protection Agency (EPA) regulations for the Prevention of Significant Deterioration (PSD) set forth in Title 40, Code of Federal Regulations, Part 52, regulations set forth in the Washington Administrative Code 173-400-700, based upon the complete Prevention of Significant Deterioration (PSD) Permit Application submitted by Sierra Pacific Industries (SPI) on August 22, 2005, and the technical analysis performed by the Department of Ecology (Ecology), Ecology now finds the following:

FINDINGS

1. SPI proposes to install a lumber manufacturing facility and a steam turbine in the Fredonia Business Park in Skagit County, Washington.

2. The property for the proposed installation is bordered on the west by the Fredonia Grange and several industrial facilities, to the east and northeast by farm and forest land, on the north by Ovenell Road, a Puget Sound Energy generating station and a metal fabrication company, and on the south by State Road 2 and Burlington Northern Sante Fe railroad tracks. The United States Geographical Survey coordinates are North 48^{o} 26' 56", West 122^{o} 25' 59". The Universal Transverse Mercator (NAD 27) coordinates are 5,366,150 meters northing, 541,950 meters easting, Zone 10.

3. SPI is located within a Class II area that is currently designated in attainment or unclassified for all national and state air quality standards (NAAQS).

4. The site is within 100 kilometers (km) of three Class I Areas: North Cascades National Park (66 km), Glacier Peak Wilderness (72 km), and Olympic National Park (75 km). It is beyond 100 km, but within 200 km of three other Class I areas: Alpine Lakes Wilderness Area (105 km), Pasayten Wilderness Area (108 km), and Mt. Rainier National Park (159 km). It is 42 km from the Mt. Baker Wilderness Area (a Class II protected area).

5. The site is 55 km from the U.S. - Canadian border (specifically, the international demarcation in the Strait of Juan deFuca, directly east of Victoria, BC).

6. This project consists of:

   6.1 Constructing a 300 million board feet per year lumber manufacturing facility consisting of three 1,100 foot long log decks, a sawmill, a planer mill, and six steam-heated drying kilns. Drying kiln capacity will be 188 million board feet per year.

6.2 Installing one wood-fired cogeneration unit with a capacity of about 430 million British thermal units per hour (MMBtu/hr) heat input, and

6.3 Installing a steam-driven electricity-generating turbine with an output capacity of 30 megawatt (MW).

7. The cogeneration unit is subject to New Source Performance Standards (NSPS): 40 CFR Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units).

8. The emissions of all air pollutants from the proposed modification are subject to review under Chapter 173-400 WAC, Chapter 173-460 WAC and the regulations of the Northwest Clean Air Agency (1600 South Second St., Mount Vernon, Washington 98273-5202). Chapter 173-400 WAC includes provision for PSD review (WAC 173-400-700). This permit considers only PSD applicable issues. All other air quality related Notice of Construction approval issues are subject to the authority of the Northwest Clean Air Agency.

9. SPI will have the potential to emit more than 250 tons per year (TPY) of a pollutant that is subject to the federal Clean Air Act. This qualifies SPI as a major stationary source as defined in federal regulations 40 CFR Part 52.21(b)(1)(i)(*b*).

10. As a result of this project, SPI's net increases in potential to emit of pollutants subject to PSD review and greater than the respective PSD significant emission rates (SER) will be:

10.1 188 TPY for nitrogen oxides (NO_X): The SER for NO_X is 40 TPY.

10.2 659 TPY for carbon monoxide (CO): The SER for CO is 100 TPY.

10.3 54 TPY of particulate matter (PM), all assumed to be under 10 microns in diameter (PM_{10}): The SERs for PM and PM_{10} are 25 TPY and 15 TPY, respectively.

10.4 47 TPY for oxides of sulfur measured as sulfur dioxide (SO_2). The SER for SO_2 is 40 TPY.

10.5 99 TPY for volatile organic compounds (VOCs). The SER for VOCs is 40 TPY.

11. SPI will be a major stationary source, will have net emissions increases for NO_X, CO, PM/PM_{10}, SO_2, and VOCs in excess of each respective PSD SER, and intends to locate in an area that is in attainment/unclassified for the NAAQS for NO_X, CO and PM/PM_{10}, SO_2, and ozone. Consequently, the project qualifies as a major new source under federal regulations [40 CFR 52.21(b)(1)(i)(*b*), 40 CFR 52.21(b)(3)(i)(*a*) and 40 CFR 52.21(b)(23)(i)], and the project is subject to PSD review.

12. Other than NO_X, CO, PM/PM_{10}, SO_2, and VOCs, SPI's net emissions increases of all pollutants subject to regulation under the federal Clean Air Act are below the significance levels specified in 40 CFR 52.21(b)(23)(i). As a result, they are not subject to inclusion in this PSD permit.

13. SPI submitted the PSD permit application on August 22, 2005. On September 21, 2005, Ecology notified SPI that the permit application was determined to be complete.

14. Best Available Control Technology (BACT) determinations:

14.1 For NO_X emissions from the wood-fired cogeneration unit:

14.1.1 Use of a spreader stoker boiler design.
14.1.2 Selective noncatalytic reduction (SNCR).
14.1.3 A short-term (24-hour average) limit of 0.13 pounds NO_X per million British thermal units (lb NO_X/MMBtu) of heat input and a rolling 12-month limit equivalent to 0.1 lb NO_X/MMBtu (188 TPY).

14.2 For CO emissions from the wood-fired cogeneration unit:

14.2.1 Good combustion practice.
14.2.2 An emission limit of 0.35 lb CO/MMBtu on an hourly average basis.

14.3 For PM_{10} emissions:

14.3.1 Planer Mill: Use of a dust collection system and baghouse with an emission limit of 0.005 grains PM_{10}/dry standard cubic foot (gr/dscft) of exhaust air.
14.3.2 Dry kilns: Best management operation.
14.3.3 Wood-fired cogeneration unit: Use of a dry electrostatic precipitator (ESP) with an emission limit of 0.02 lb PM_{10}/MMBtu (0.01 gr/dscft) on a 24-hour average basis.

14.4 For SO_2 emissions from the wood-fired cogeneration unit:

14.4.1 No control when burning only wood.
14.4.2 Non-wood fuel limited to natural gas.
14.4.3 Use of natural gas limited to igniting the wood fuel on startup and maintaining good combustion when using excessively wet fuel.

14.5 For VOC emissions:

14.5.1 Dry kilns: Best operating practice of a computerized steam management system.
14.5.2 Anti-mold spray system: Drip-free lumber when exiting the system and best operating practice of a mist eliminator.
14.5.3 Wood-fired cogeneration unit: Good combustion practice with an emission limit of 0.019 lb VOCs/MMBtu measured as propane on a 24-hour average basis.

15. Allowable emissions:

15.1 Will not cause or contribute to air pollution in violation of any NAAQS.
15.2 Full impact modeling was required for PM_{10} because the projected Class II Area 24-hour and annual impacts exceeded the significance threshold.
15.3 Full impact modeling was required for startup/shutdown CO because the projected Class II Area 8-hour impact exceeded the significance threshold.
15.4 The predicted NO_X, CO, and SO_2 ambient impacts did not exceed the respective Class I or Class II Area significance thresholds. A cumulative ozone impact analysis is not required because VOC emissions are not expected to exceed 100 TPY.

Pollutant	Modeling Results, micrograms per cubic meter ($\mu grams/m^3$)		Modeling Significance Level $\mu grams/m^3$		Class I area Allowable Increment Consumption $\mu grams/m^3$	Class II area Allowable Increment Consumption $\mu grams/m^3$	Monitoring Requirement Threshold $\mu grams/m^3$	NAAQS $\mu grams/m^3$
	Class I area	Class II area	Class I area	Class II area				
NO_2, annual average	0.003	0.466	0.1	1.0	2.5	25	14	100
CO, 1-hour average	N/A	261 Normal operation 1,893 Startup & shutdown 10,893 Startup & shutdown plus worst case back-ground	N/A	2,000	N/A	N/A	None	35,000
CO, 8-hour average	N/A	153 Normal operation 1,329 Startup & shutdown 5,629 Startup & shutdown plus worst case back-ground	N/A	500	N/A	N/A	575	10,000
SO_2, 3-hour average	0.031	15.8	1.0	25	25	512	None	1,300
SO_2, 24-hour average	0.013	4.25	0.2	5	5	91	13	365

Pollutant	Modeling Results, micrograms per cubic meter (μgrams/m^3)		Modeling Significance Level μgrams/m^3		Class I area Allowable Increment Consumption μgrams/m^3	Class II area Allowable Increment Consumption μgrams/m^3	Monitoring Requirement Threshold μgrams/m^3	NAAQS μgrams/m^3
	Class I area	Class II area	Class I area	Class II area				
SO_2, annual average	9×10^{-4}	0.16	0.1	1	2	20	None	80
PM_{10}, 24-hour average	0.076	27.9	0.3	5	10	30	10	150
PM_{10}, annual average	0.003	7.11 SPI Skagit alone 7.39 All emission sources 20.5 Including back-ground	0.2	1	5	17	None	50

16. Allowable emissions will not cause a significant visibility impact in:

    16.1 The surrounding Class I areas: The highest modeled impact was 4.8% degradation in the North Cascades National Park in early summer. Federal land manager guidance considers this to be below the "concern" threshold.

    16.2 Nearby Class II wilderness and scenic areas: The highest modeled impact was 3.4% degradation in the Mt. Baker Wilderness Area in early summer. Federal land manager guidance considers this to be below the "concern" threshold.

17. Ambient impact analysis indicates that there will be no significant pollutant deposition on soils and vegetation in the Class I or Class II areas.

    17.1 Modeled emissions ambient impact levels are substantially below all secondary NAAQS. This indicates a low likelihood of negative impact on Class II area flora and fauna. No sensitive species have been identified.

    17.2 The highest modeled deposition in the surrounding Class I areas is 0.0027 kilograms nitrogen and 0.0014 kilograms sulfur per hectare per year. This is expected to occur in the North Cascades National Park. The nitrogen deposition levels are a little over 50% of the "concern" threshold in federal land manager guidance. The sulfur deposition level is 28% of the federal land manager "concern" level.

18. No significant effect on industrial, commercial or residential growth in the Skagit County, Washington area is anticipated as a result of this project.

19. The Washington State Environmental Policy Act lead agency for the project, Skagit County Planning and Development Services, determined that the proposed project does not have a probable adverse impact on the environment, and that an environmental impact statement is not required under RCW 43.21C.030(2)(C). Skagit County issued a Mitigated Determination of Nonsignificance on October 25, 2005.

20. No written or verbal comments in opposition to the terms of this permit were submitted during the pubic review and comment period or during the public hearing held on December 8, 2005 at the offices of the Northwest Clean Air Agency.

21. Ecology finds that all requirements for PSD have been satisfied. Approval of the PSD application is granted subject to the following conditions.

APPROVAL CONDITIONS

1. Requirements specified in the following approval conditions for SPI to notify or report to or acquire approval or agreement from "Ecology and the Northwest Clean Air Agency" may be satisfied by providing such notification, reporting, or approval request to the Northwest Clean Air Agency if the approval conditions of this PSD permit have been incorporated in SPI's Title V permit (40 CFR Part 70).

2. SPI-Skagit shall use only wood preservatives that have been approved by the USEPA under the Federal Insecticide, Fungicide, and Rodenticide Act.

3. Startup and shutdown defined:

   3.1 Cold startups and shutdowns:

      3.1.1 A cold startup is one that starts or resumes feeding fuel of any type when the wood-fired cogeneration unit furnace temperature is 150 degrees Fahrenheit (^{o}F) or lower. A cold startup ends upon the earlier of:

         3.1.1.1 Four hours after starting wood fuel feed to the boiler,

         3.1.1.2 Dry basis flue gas carbon dioxide concentration has been greater than or equal to 11% and less than or equal to 13% for one hour while the flue gas CO concentration has simultaneously not exceeded 260 ppmdv,

         3.1.1.3 Steam flow exceeded 150,000 pounds over the previous hour, or

         3.1.1.4 24 hours after starting or resuming feeding fuel of any type.

      3.1.2 A cold shutdown is one wherein wood fuel feed stops, and the furnace is allowed to cool to 150 ^{o}F or lower. A cold shutdown ends when:

         3.1.2.1 No fuel of any type is being feed, and the furnace temperature is 150 ^{o}F or lower and the FD fan is off-line, or

         3.1.2.2 24 hours after wood fuel feed was stopped, whichever comes first.

   3.2 Warm startups and shutdown:

3.2.1 A warm startup is one that starts or resumes feeding fuel of any type when the wood-fired cogeneration unit furnace temperature is higher than 150 ^{o}F. A warm startup ends upon the earlier of:

3.2.1.1 Four hours after starting wood fuel feed to the boiler,

3.2.1.2 Dry basis flue gas carbon dioxide concentration has been greater than or equal to 11% and less than or equal to 13% for one hour while the flue gas CO concentration has simultaneously not exceeded 260 ppmdv,

3.2.1.3 Steam flow exceeded 150,000 pounds over the previous hour, or

3.2.1.4 Eight hours after starting or resuming feeding fuel of any type.

3.2.2 A warm shutdown is one wherein wood fuel feed stops, but the furnace temperature does not cool to 150 ^{o}F or lower before wood fuel feed is resumed. A warm shutdown ends when:

3.2.2.1 Wood fuel feed is resumed,

3.2.2.2 No fuel of any type is being feed, and the furnace temperature is 150 ^{o}F or lower (at which point the shutdown becomes a "cold shutdown"), or

3.2.2.3 24 hours after wood fuel feed was stopped, whichever comes first.

4. The wood-fired cogeneration unit may burn natural gas in the wood-fired cogeneration unit only:

4.1 To ignite the wood fuel, or

4.2 To maintain good combustion.

Emission Limits

5. Wood-fired cogeneration unit exhaust stack:

5.1 NO_X emissions shall not exceed the following limits:

5.1.1 Calendar day average:

5.1.1.1 56 pounds NO_X per hour.

5.1.1.2 0.13 lb NO_X/MMBtu based on heat input value of the fuel.

5.1.2 In any consecutive 12-month period:

5.1.2.1 188 tons NO_X emissions.

5.1.2.2 0.10 lb NO_X/MMBtu based on an average of the previous 12 months of daily values.

5.2 CO emissions:

5.2.1 Shall not exceed the following limits:

5.2.1.1 0.35 lb CO/MMBtu (1-hour average) based on heat input value of the fuel except during startup or shutdown.

5.2.1.2 659 tons CO in any consecutive 12-month period including startups and shutdowns.

5.2.1.3 400 lb CO/hr (1-hour average) during cold startups and shutdowns.

5.2.1.4 300 lb CO/hr (1-hour average) during warm startups and shutdowns.

5.2.2 CO emissions measurement is to continue at all times the wood-fired cogeneration unit furnace temperature is above 150 ^{o}F.

5.3 PM/PM_{10} emissions:

5.3.1 All particulate matter (PM/PM_{10}) emissions shall be expressed as PM_{10}.

5.3.2 The sum of filterable and condensable PM/PM_{10} emissions shall not exceed the following limits:

5.3.2.1 0.02 lb PM_{10}/MMBtu (24-hour average) based on heat input value of the fuel.

5.3.2.2 37.7 tons PM_{10} in any consecutive 12-month period.

5.4 SO_2 emissions shall not exceed the following limits:

5.4.1 0.025 lb SO_2/MMBtu (3-hour average) based on heat input value of the fuel.

5.4.2 47.1 tons in any consecutive 12-month period.

5.5 VOC emissions:

5.5.1 VOCs shall be calculated as propane (three carbons per molecule, molecular weight: 44).

5.5.2 VOC emissions shall not exceed the following limits:

5.5.2.1 0.019 lb VOC/MMBtu (1-hour average) based on heat input value of the fuel.

5.5.2.2 35.8 tons in any consecutive 12 months.

6. Planer mill bag house exhaust stack:

6.1 All particulate matter (PM/PM_{10}) emissions shall be expressed as PM_{10}.

6.2 PM/PM_{10} emissions shall not exceed the following limits:

6.2.1 0.005 gr PM_{10}/dscft (1-hour average)

6.2.2 9.4 tons PM_{10} in any consecutive 12-month period.

7. Dry kilns:

7.1 PM/PM_{10} emissions from the dry kilns shall not exceed 4 tons in any consecutive 12-month period.

7.2 VOC emissions:

7.2.1 VOCs shall be calculated as pinene (10 carbons per molecule, molecular weight: 136).

7.2.2 SPI will operate the computerized steam management system for the dry kilns to minimize steam demand in accordance with the manufacturer's specifications.

7.2.3 VOC emissions shall not exceed 54 tons in any consecutive 12-month period.

8. Anti-mold spray system:

8.1 Anti-mold spray chamber shall be a "drip-free" design.

8.2 SPI will operate and maintain the spray chamber mist eliminator and condensate recycle system in accordance with the manufacturer's specifications.

8.3 VOC emissions shall not exceed 9 tons in any consecutive 12-month period.

Initial Compliance Demonstration

9. Compliance demonstration data conversions to "per MMBtu" basis shall either be determined by

9.1 The method outlined in the paragraph in Appendix A, Method 19 of 40 CFR Part 60 titles “Determined F Factors” (in the 2004 version of 40 CFR Part 60: Paragraph 12.3.2), or

9.2 Factors from table in Appendix A, Method 19 of 40 CFR Part 60 titles, “F Factors for Various Fuels” (in the 2004 version of 40 CFR Part 60: Table 19-2). The factor shall reflect the proportions of wood, bark, and natural gas in the fuel by either:

9.2.1 Determining the wood and bark proportions of the fuel used during the test based on randomized fuel sampling following procedure outlined in the corresponding test plan approved by Ecology and Northwest Clean Air Agency, or

9.2.2 A default assumption of equal proportions of wood and bark.

Example: a 50:50 wood/bark mixture with no natural gas will have an F_d-factor of 9,420 dscf/MMBtu.

10. NO_X emissions from the wood-fired cogeneration unit exhaust stack:

10.1 SPI will demonstrate initial compliance with Condition 5.1.1:

10.1.1 SPI will conduct a compliance test within 60 days of achieving the maximum firing rate at which the wood-fired cogeneration unit will be operated, but not later than 180 days after initial startup.

10.1.2 The compliance test will use a continuous emission monitoring system (CEMS) that measures and records NO_X emissions from the wood-fired cogeneration unit exhaust stack.

10.1.3 The CEMS will meet the requirements of Condition 21.1.

10.1.4 For the compliance test, NO_X emissions from the wood-fired cogeneration unit are continuously monitored.

10.1.4.1 For not less than 24 consecutive cogeneration unit operating hours.

10.1.4.2 At an average firing rate of not less than 90 percent of rated capacity.

10.1.5 Compliance will be determined from the arithmetic mean of the NO_X emissions data in lb NO_X/MMBtu monitored pursuant to Condition 10.1.4, using a continuous 24-hour period of the compliance test.

10.1.6 SPI will submit a test plan to Ecology and Northwest Clean Air Agency for approval at least 30 days prior to initial performance testing.

10.2 SPI will demonstrate initial compliance with Condition 5.1.2.2:

10.2.1 SPI will conduct a compliance test within 60 days of achieving the maximum firing rate at which the wood-fired cogeneration unit will be operated, but not later than 180 days after initial startup.

10.2.2 The compliance test will use a CEMS that measures and records NO_X emissions from the wood-fired cogeneration unit exhaust stack.

10.2.3 The CEMS will meet the requirements of Condition 21.1.

10.2.4 For the compliance test, NO_X emissions from the wood-fired cogeneration unit are continuously monitored for 30 successive cogeneration unit operating days.

10.2.5 Compliance will be determined from the arithmetic mean of the NO_X emissions data in lb NO_X/MMBtu monitored pursuant to Condition 10.2.4.

10.2.6 The compliance test shall be consistent with the procedure outlined in 40 CFR 60.46b(e)(1) and (3).

10.2.7 SPI will submit a test plan to Ecology and Northwest Clean Air Agency for approval at least 30 days prior to initial performance testing.

11. CO emissions from the wood-fired cogeneration unit exhaust stack: SPI will demonstrate initial compliance with Conditions 5.2.1.1.

11.1 SPI will have a compliance test conducted by an independent testing vendor within 60 days of achieving the maximum firing rate at which the wood-fired cogeneration unit will be operated, but not later than 180 days after initial startup.

11.2 The compliance test shall be performed after each installed CEMS has satisfied all performance demonstration requirements under 40 CFR 60.13(c).

11.3 The wood-fired cogeneration unit is to be operated at an average firing rate of not less than 90 percent of rated capacity during the compliance test.

11.4 Compliance will be determined by EPA Reference Method 10.

11.4.1 Compliance will be demonstrated from the arithmetic mean of not less than three 1-hour test samples.

11.4.2 The non-dispersive infrared analyzer must have performance specifications allowing a minimum detectable sensitivity appropriate to the CO concentration limits specified in this condition.

11.4.3 The span and linearity calibration gas concentrations in Method 10 will be appropriate to the CO concentration limits specified in this condition.

11.4.4 Equivalent concentration test methods may be used if approved in advance by Ecology and Northwest Clean Air Agency.

11.4.5 Mass emission rates will be determined using the appropriate procedures outlined in 40 CFR part 60 Appendix A Method 19 with indicated calculations modified to be applicable to CO.

11.4.6 An equivalent mass emission rate calculation method may be used if approved in advance by Ecology and Northwest Clean Air Agency.

11.5 SPI will submit a test plan to Ecology and Northwest Clean Air Agency for approval at least 30 days prior to initial performance testing.

12. PM/PM_{10}:

12.1 Emission limits for the wood-fired cogeneration unit exhaust stack: SPI will demonstrate initial compliance with Condition 5.3.2.1.

12.1.1 SPI will have a compliance test conducted by an independent testing vendor within 60 days of achieving the maximum firing rate at which the wood-fired cogeneration unit will be operated, but not later than 180 days after initial startup.

12.1.2 The compliance test shall be performed after each installed CEMS has satisfied all required performance demonstration requirements under 40 CFR 60.13(c).

12.1.3 The test shall be scheduled concurrently with the initial compliance demonstrations required in Condition 13 (SO_2) and in Condition 14 (VOCs).

12.1.4 The wood-fired cogeneration unit is to be operated at an average firing rate of not less than 90 percent of rated capacity during the compliance test.

12.1.5 Compliance will be determined by EPA Reference Methods 5 and 202.

12.1.5.1 EPA Reference Method 5 will be conducted in the manner prescribed in 40 CFR 60.46b(d).

12.1.5.2 Compliance will be demonstrated from the arithmetic mean of not less than three 2-hour test samples.

12.1.5.3 The emission rate expressed in lb PM_{10}/MMBtu will be determined using the procedure described in 40 CFR 60.46b(d)(6).

12.1.5.4 Equivalent concentration test methods may be used if approved in advance by Ecology and Northwest Clean Air Agency.

12.1.6 SPI will submit a test plan to Ecology and Northwest Clean Air Agency for approval at least 30 days prior to initial performance testing.

12.2 Emission limits for the planer mill bag house exhaust stack: SPI will demonstrate initial compliance with Condition 6.2.1.

12.2.1 SPI will have a compliance test conducted by an independent testing vendor Within 60 days of achieving the maximum rate at which the planer mill will be operated, but not later than 180 days after initial startup.

12.2.2 The planer mill is to be operated at not less than 50,000 board feet per hour during the compliance test.

12.2.3 Compliance will be determined by EPA Reference Methods 5 and 202.

12.2.3.1 Compliance will be demonstrated from the arithmetic mean of not less than three 2-hour test samples.

12.2.3.2 Equivalent concentration test methods may be used if approved in advance by Ecology and Northwest Clean Air Agency.

12.2.4 Compliance with Condition 6.2.1 will be deemed demonstrated if the result of the test pursuant to Condition 12.2.1 is not greater than the limit specified in Condition 6.2.1 and not greater than 0.045 pounds PM_{10} per thousand board feet planer throughput.

12.3 Emissions limits from the dry kilns: SPI will demonstrate initial compliance with Condition 7.1 by incorporating the manufacturer's operating specifications for the dry kilns in the facility operating manual.

13. SO_2 emissions from the wood-fired cogeneration unit exhaust stack: SPI will demonstrate initial compliance with Conditions 5.4.1.

13.1 SPI will have a compliance test conducted by an independent testing vendor within 60 days of achieving the maximum firing rate at which the wood-fired cogeneration unit will be operated, but not later than 180 days after initial startup.

13.2 The compliance test shall be performed after each installed CEMS has satisfied all required performance demonstration requirements under 40 CFR 60.13(c).

13.3 The test shall be scheduled concurrently with the initial compliance demonstrations required in Condition 12.1 (PM/PM_{10}) and Condition 14 (VOCs).

13.4 The wood-fired cogeneration unit is to be operated at an average firing rate of not less than 90 percent of rated capacity during the compliance test.

13.5 Compliance with Conditions 5.4.1 will be determined by EPA Reference Method 6, 6A, or 6C.

13.5.1 Compliance will be demonstrated from the arithmetic mean of not less than three 1-hour test samples.

13.5.2 An equivalent concentration test method may be used if approved in advance by Ecology and Northwest Clean Air Agency.

13.5.3 SO_2 mass emissions will be determined using the procedures outlined in 40 CFR part 60 Appendix A Method 19, and based on the total heat value of fuel consumed over each operating hour.

13.5.4 An equivalent mass emission rate calculation method may be used as an alternative to Condition 13.5.3 if approved in advance by Ecology and Northwest Clean Air Agency.

13.6 SPI will submit a test plan to Ecology and Northwest Clean Air Agency for approval at least 30 days prior to initial performance testing.

14. VOCs

14.1 Emission limits for the wood-fired cogeneration unit exhaust stack: SPI will demonstrate initial compliance with Condition 5.5.2.1

14.1.1 SPI will have a performance test conducted by an independent testing vendor within 60 days of achieving the maximum firing rate at which the wood-fired cogeneration unit will be operated, but not later than 180 days after initial startup.

14.1.2 The compliance test shall be performed after each installed CEMS has satisfied all required performance demonstration requirements under 40 CFR 60.13(c).

14.1.3 The test shall be scheduled concurrently with the initial compliance demonstrations required in Condition 12.1 (PM/PM_{10}) and in Condition 13 (SO_2).

14.1.4 The wood-fired cogeneration unit is to be operated at an average firing rate of not less than 90 percent of rated capacity during the compliance test.

14.1.5 Compliance will be determined by the arithmetic mean of not fewer than three test samples using EPA Reference Method 25, 25A, or 25B.

14.1.5.1 An equivalent concentration test method may be used if approved in advance by Ecology.

14.1.5.2 VOC mass emissions will be determined using the procedures outlined in 40 CFR part 60 Appendix A Method 19, and based on the total heat value of fuel consumed over each operating hour.

14.1.5.3 An equivalent mass emission rate calculation method may be used as an alternative to Condition 14.1.5.2 if approved in advance by Ecology.

14.1.6 SPI will submit a test plan to Ecology and Northwest Clean Air Agency for approval at least 30 days prior to initial performance testing.

14.2 Dry kilns: SPI will demonstrate initial compliance with Condition 7.2.2 by incorporating the manufacturer's operating specifications for the computerized steam management system for the dry kilns in the facility operating manual.

14.3 Anti-mold spray system: SPI will demonstrate initial compliance with Condition 8.1 by incorporating the manufacturer's operating specifications for the spray chamber mist eliminator and condensate recycle system in the facility operating manual.

Compliance Monitoring

15. Compliance monitoring data conversions to "per MMBtu" basis shall either be determined by the same procedure outlined for compliance demonstration in Condition 9.

16. NO_X emissions from the wood-fired cogeneration unit exhaust stack:

    16.1 SPI will monitor continuing compliance with Condition 5.1.1:

        16.1.1 Following the date the initial performance test in Condition 10.1 is completed, or is required to be complete, whichever date comes first.

        16.1.2 Continuous compliance will be monitored by a CEMS that measures and records NO_X emissions from the wood-fired cogeneration unit exhaust stack.

        16.1.3 The CEMS will meet the requirements of Condition 21.1.

        16.1.4 Compliance will be determined from the arithmetic mean of the hours of valid NO_X emissions data in lb NO_X/MMBtu monitored pursuant to Condition 16.1.2.

            16.1.4.1 Data that is "valid" shall be as defined in 40 CFR 60.13(h).

            16.1.4.2 A calendar day used for compliance monitoring shall have at least 18 hours of valid data.

            16.1.4.3 Valid data from any calendar day having fewer than 18 hours of valid data shall be included in either the following or preceding day's data, whichever is contiguous, and the 24-hour average calculated using the cumulative hours of the conjoined periods.

    16.2 SPI will monitor continuing compliance with Condition 5.1.2:

        16.2.1 Following the date the initial performance test in Condition 10.2 is completed, or is required to be complete, whichever date comes first.

        16.2.2 Continuous compliance will be monitored by a CEMS that measures and records NO_X emissions from the wood-fired cogeneration unit exhaust stack.

        16.2.3 The CEMS will meet the requirements of Condition 21.1.

        16.2.4 Continuous compliance will be monitored from the arithmetic mean of the NO_X emissions data monitored pursuant to Condition 16.2.2.

17. CO emissions from the wood-fired cogeneration unit exhaust stack:

    17.1 SPI will monitor continuing compliance with Condition 5.2.1.1.

        17.1.1 Following the date the initial performance test in Condition 11.1 is completed, or is required to be complete, whichever date comes first.

        17.1.2 Continuous compliance will be determined by a CEMS that measures and records CO emissions from the wood-fired cogeneration unit exhaust stack.

        17.1.3 The CEMS will meet the requirements of Condition 21.2.

    17.2 SPI will monitor continuing compliance with Condition 5.2.1.2, 5.2.1.3, and 5.2.1.4 from the arithmetic mean of the emissions data for each corresponding operating scenario and averaging period.

18. PM/PM_{10}:

18.1 Emission limits from the wood-fired cogeneration unit exhaust stack:

18.1.1 SPI will monitor continuing compliance with Condition 5.3.2.1

18.1.1.1 SPI will have periodic compliance tests conducted by an independent testing vendor:

18.1.1.1.1 At least once every 12 months, beginning from the date the initial performance test in Condition 12.1.1, is completed, or is required to be complete, whichever date comes first.

18.1.1.1.2 If all source tests conducted during a consecutive thirty month period (not less than three separate tests) demonstrate emissions are less than 75% of the limit in Condition 5.3.2.1, the testing interval shall be changed to not less frequently than once every 24 months.

18.1.1.1.3 If the test frequency described in Condition 18.1.1.1.2 has been enacted, any subsequent source test result greater than 75% of the limit in Condition 5.3.2.1 shall require reversion to Condition 18.1.1.1.1 until such time as the provision recurs described in Condition 18.1.1.1.2 and allows its reinstatement.

18.1.1.2 Compliance will be determined by EPA Reference Methods 5 and 202.

18.1.1.2.1 EPA Reference Method 5 will be conducted in the manner prescribed in 40 CFR 60.46b(d).

18.1.1.2.2 Compliance will be demonstrated from the arithmetic mean of not less than three 2-hour test samples.

18.1.1.2.3 The emission rate expressed in lb PM_{10}/MMBtu will be determined using the procedure described in 40 CFR 60.46b(d)(6).

18.1.2 SPI will monitor continuing compliance with Condition 5.3.2.2.

18.1.2.1 Beginning from the date the initial performance test in Condition 12.1.1 is completed, or is required to be complete, whichever date comes first.

18.1.2.2 Compliance will be monitored from the arithmetic mean of the test results from Condition 18.1.1 in TPY PM_{10} based on monthly average firing rates.

18.2 Emission limits from the planer mill exhaust stack:

18.2.1 SPI will monitor continuing compliance with Condition 6.2.1.

18.2.1.1 SPI will have periodic compliance tests:

18.2.1.1.1 Conducted by an independent testing vendor.

18.2.1.1.2 Test frequency.

18.2.1.1.2.1 Beginning from the required or actual completion date of the initial performance test in Condition 12.2.1 whichever date comes first.

18.2.1.1.2.2 At least once every 12 months unless the provision described in Condition 18.2.1.1.2.3 occurs.

18.2.1.1.2.3 If all source tests conducted during a consecutive thirty month period (not less than three separate tests) show PM/PM_{10} emissions less than or equal to 0.0025 gr/dscft, test frequency may be reduced to once every thirty-six months.

18.2.1.1.2.4 If the test frequency described in Condition 18.2.1.1.2.3 has been enacted, any subsequent source test result greater than 0.0025 gr/dscft shall require reversion to Condition 18.2.1.1.2.1 until such time as the provision recurs described in Condition 18.2.1.1.2.3 and allows its reinstatement.

18.2.1.2 Compliance will be determined by EPA Reference Methods 5 and 202.

18.2.1.2.1 Compliance will be demonstrated from the arithmetic mean of not less than three 2-hour test samples.

18.2.1.2.2 Equivalent concentration test methods may be used if approved in advance by Ecology and Northwest Clean Air Agency.

18.2.2 SPI will monitor continuing compliance with Condition 6.2.2:

18.2.2.1 Beginning from the date the initial performance test in Condition 12.2.1 is completed, or is required to be complete, whichever date comes first.

18.2.2.2 Compliance will be monitored from the arithmetic mean of the test results from Condition 18.2.1 and monthly production rates.

18.2.2.2.1 SPI will determine an emission factor based on the test results from Condition 18.2.1 and the planer mill production rate maintained during the corresponding tests.

18.2.2.2.2 SPI will update the emission factor as soon as the results are available from each compliance monitoring test.

18.2.2.2.3 SPI will use the updated emission factor until the next compliance monitoring test results are available.

18.3 Emission limits from the dry kilns: SPI will monitor continuing compliance with Condition 7.1.

18.3.1 Beginning with the date of initial startup of the dry kilns.

18.3.2 For each wood species processed, SPI will separately record monthly dry kiln production in board feet.

18.3.3 Each month's dry kiln PM/PM_{10} emissions shall be determined based on each specie's emission factor:

18.3.3.1 Douglas Fir: 0.02 pounds PM/PM_{10}/thousand board feet (lb PM/PM_{10}/Mbf).

18.3.3.2 Western Hemlock: 0.04 lb PM/PM_{10}/Mbf.

18.3.3.3 All other wood species:

18.3.3.3.1 If the proportion of "other wood species" used during the month is less than or equal to 10% of the total month's production, SPI shall use either 0.04 lb PM/PM_{10}/Mbf or a species-specific emission factor approved in writing by Ecology and NWCAA.

18.3.3.3.2 If the proportion of "other wood species" used during the month is greater than 10% of the total month's production, SPI shall use a species-specific emission factor approved in writing by Ecology and NWCAA.

19. SO_2 emissions from the wood-fired cogeneration unit exhaust stack:

19.1 SPI will monitor continuing compliance with Condition 5.4.1:

19.1.1 SPI will have periodic compliance tests conducted by an independent testing vendor:

19.1.1.1 At least once every 12 months, beginning from the date the initial performance test in Condition 13.1 is completed, or is required to be complete, whichever date comes first.

19.1.1.2 If three consecutive tests demonstrate emissions are less than 75% of the limits in Condition 5.4.1, the testing interval shall be changed to not less frequently than once every 24 months..

19.1.1.3 If the test frequency described in Condition 19.1.1.2 has been enacted, any subsequent source test result greater than 75% of the limit in Condition 5.4.1 shall require reversion to Condition 19.1.1.1 until such time as the provision recurs described in Condition 19.1.1.2 and allows its reinstatement.

19.1.2 At least one source test within any relevant test frequency period is to coincide with the Relative Accuracy Test Audit required for each installed CEMS.

19.1.3 Compliance will be determined by EPA Reference Method 6, 6A, or 6C.

19.1.3.1 Compliance will be demonstrated from the arithmetic mean of not less than three 1-hour test samples.

19.1.3.2 An equivalent concentration test method may be used if approved in advance by Ecology.

19.1.3.3 SO_2 mass emissions will be determined using the procedures outlined in 40 CFR part 60 Appendix A Method 19, and based on the total heat value of fuel consumed over each operating hour.

19.1.3.4 An equivalent mass emission rate calculation method may be used as an alternative to Condition 19.1.3.3 if approved in advance by Ecology and Northwest Clean Air Agency.

19.1.4 SPI will notify Ecology and Northwest Clean Air Agency at least 30 days prior to the scheduled performance testing.

19.2 SPI will monitor continuing compliance with Condition 5.4.2.

19.2.1 Beginning from the date the initial performance test in Condition 13.1 is completed, or is required to be complete, whichever date comes first.

19.2.2 Compliance will be monitored from the arithmetic mean of the test results from Condition 19.1 and monthly average firing rates.

19.2.2.1 Mass emission rates will be determined using the appropriate procedures outlined in 40 CFR Part 60 Appendix A Method 19.

19.2.2.2 An equivalent mass emission rate calculation method may be used if approved in advance by Ecology and Northwest Clean Air Agency.

20. VOCs:

20.1 Emission limits from the wood-fired cogeneration unit exhaust stack:

20.1.1 SPI will monitor continuing compliance with Condition 5.5.2.1.

20.1.1.1 SPI will have periodic compliance tests conducted by an independent testing vendor:

20.1.1.1.1 At least once every 12 months, Beginning from the date the initial performance test in Condition 14.1.1 is completed, or is required to be complete, whichever date comes first.

20.1.1.1.2 If three consecutive tests demonstrate emissions are less than 75% of the limits in Condition 5.5.2.1, the testing interval shall be changed to not less frequently than once every 24 months.

20.1.1.1.3 If the test frequency described in Condition 20.1.1.1.2 has been enacted, any subsequent source test result greater than 75% of the limit in Condition 5.5.2.1 shall require reversion to Condition 20.1.1.1.1 until such time as the provision recurs described in Condition 20.1.1.1.2 and allows its reinstatement.

20.1.1.2 At least one source test within any 12-month period is to coincide with the Relative Accuracy Test Audit required for each installed CEMS.

20.1.1.3 Compliance will be determined by EPA Reference Method 25, 25A, or 25B.

20.1.1.3.1 Compliance will be demonstrated from the arithmetic mean of not less than three 1-hour test samples.

20.1.1.3.2 An equivalent concentration test method may be used if approved in advance by Ecology.

20.1.1.3.3 VOC mass emissions will be determined using the procedures outlined in 40 CFR part 60 Appendix A Method 19 with indicated calculations modified to be applicable to VOCs measured as propane, and based on the total heat value of fuel consumed over each operating hour.

20.1.1.3.4 An equivalent mass emission rate calculation method may be used as an alternative to Condition 20.1.1.3.3 if approved in advance by Ecology and Northwest Clean Air Agency.

20.1.1.4 SPI will notify Ecology and Northwest Clean Air Agency at least 30 days prior to the scheduled performance testing.

20.1.2 SPI will monitor continuing compliance with Condition 5.5.2.2

20.1.2.1 Beginning from the date the initial performance test in Condition 14.1.1 is completed, or is required to be complete, whichever date comes first.

20.1.2.2 Compliance will be monitored from the arithmetic mean of the test results from Condition 20.1 and monthly average firing rates.

20.1.2.2.1 Mass emission rates will be determined using the appropriate procedures outlined in 40 CFR Part 60 Appendix A Method 19 with indicated calculations modified to be applicable to VOCs measured as propane.

20.1.2.2.2 An equivalent mass emission rate calculation method may be used if approved in advance by Ecology and Northwest Clean Air Agency.

20.2 Emission limits from the dry kilns: SPI will monitor continuing compliance with Condition 7.2.3.

20.2.1 Beginning with the date of initial startup of the dry kilns.

20.2.2 For each wood species processed, SPI will separately record monthly dry kiln production in board feet.

20.2.3 Each month's dry kiln VOC emissions shall be determined based on each specie's emission factor:

20.2.3.1 Douglas Fir: 0.6 pounds VOC/thousand board feet (lb VOC/Mbf).

20.2.3.2 Western Hemlock: 0.33 lb VOC/Mbf.

20.2.3.3 All other wood species:

20.2.3.3.1 If the proportion of "other wood species" used during the month is less than or equal to 10% of the total month's production, SPI shall use either 0.6 pounds lb VOC/Mbf or a species-specific emission factor approved in writing by Ecology and NWCAA.

20.2.3.3.2 If the proportion of "other wood species" used during the month is greater than 10% of the total month's production, SPI shall use a species-specific emission factor approved in writing by Ecology and NWCAA.

20.3 Emission limits from the anti-mold spray system: SPI will monitor continuing compliance with Condition 8.3.

20.3.1 Beginning with the date of initial startup of the dry kilns.

20.3.2 SPI will quantify its consumption of wood treatment materials in the anti-mold spray system each month.

20.3.3 VOCs shall be calculated monthly as the proportion VOC identified in the wood treatment Material Safety Data (MSD) sheets.

Example: The MSD sheet for NP-1® Plus (Sapstain Control) indicates it is 25% VOC by weight. The MSD sheet for Alpha™-700 (Wood Brightener) indicates it is 95% VOC by weight.

21. Continuous Emission Monitoring Systems:

21.1 Installation, calibration, maintenance and operation of the CEMS for NOx compliance will satisfy the requirements contained in 40 CFR 60.48b(b) through 40 CFR 60.48b(f).

21.2 CEMS for CO will satisfy the requirements contained in 40 CFR, Part 60, Appendix B, Performance Specification 4 and 40 CFR, Part 60, Appendix F, Quality Assurance Procedures.

21.3 Required Relative Accuracy Test Audit for the NOx and CO CEMS will be performed during the same test periods.

Recordkeeping, Notification and Reporting

22. SPI will notify and report to Ecology and Northwest Clean Air Agency, and maintain related records as follows:

22.1 Notifications and reports will be in written format unless otherwise approved by Ecology.

22.2 The following notifications shall be submitted to Ecology and Northwest Clean Air Agency:

22.2.1 Commencement of construction of the mill and of the wood-fired cogeneration unit: No later than 30 calendar days after such date.

22.2.2 Initial startup of the mill and of the wood-fired cogeneration unit: No later than 15 calendar days after such date.

22.2.3 Completion of the entry into the operation and maintenance manual of the items specified in Condition 24, within fifteen days after such entries were completed.

22.2.4 At the time of submittal of the notification required in Condition 22.2.3, certification by the responsible party for the facility that the relevant equipment was installed consistent with the parameters developed pursuant to Condition 24.

22.2.5 The date on which the NOx CEMS first demonstrated satisfactory performance pursuant to Condition 21.1, no later than 30 calendar days after such date.

22.2.6 The date on which the CO CEMS first demonstrated satisfactory performance pursuant to Condition 21.2, no later than 30 calendar days after such date.

22.3 The following reports shall be submitted to Ecology and Northwest Clean Air Agency:

22.3.1 Report results of all initial compliance demonstration source tests no later than 45 calendar days after completion of each respective source test.

22.3.2 Continuing performance monitoring reports required under Condition 22.3.3 shall be submitted for each calendar quarter:

22.3.2.1 Beginning with the quarter that includes the initial startup of the wood-fired cogeneration unit.

22.3.2.2 Postmarked not later than one calendar month after the close of each respective calendar quarter.

22.3.2.3 In the report format approved by Ecology and Northwest Clean Air Agency.

22.3.2.4 Another reporting schedule may be used if approved by Ecology and Northwest Clean Air Agency.

22.3.3 Continuing performance monitoring reports will include, but not necessarily be limited to, the following:

22.3.3.1 Certification by the responsible party for the facility that the relevant equipment was operated and maintained in accordance with the operational parameters and practices developed pursuant to Condition 24.

22.3.3.2 Emissions from the wood-fired cogeneration unit exhaust stack:

22.3.3.2.1 Pursuant to compliance under Condition 5.1.1, NO_X emissions (lb/MMBtu) since the last report.

22.3.3.2.2 Pursuant to compliance under Condition 5.1.2, for each month since the last report, show the 12-month NO_X emissions (lb/MMBtu) and total NO_X mass emissions ending with that month.

Example: A report for September 2006 through August 2007 would show total emissions for:

October 2005 through September 2006
November 2005 through October 2006
December 2005 through November 2006
January 2006 through December 2006
•
•
•
September 2006 through August 2007

22.3.3.2.3 Pursuant to compliance under Condition 5.2.1.1, CO emission (lb/MMBtu) since the last report.

22.3.3.2.4 Pursuant to compliance under Condition 5.2.1.2, for each month since the last report, show the 12-month CO mass emissions ending with that month. See example in Condition 22.3.3.2.2.

22.3.3.2.5 Pursuant to compliance under Conditions 5.2.1.3 and 5.2.1.4, the times, durations, and average hourly CO mass emissions for any cold or warm startups and shutdowns.

22.3.3.2.6 Pursuant to compliance under Condition 5.3.2.1, results of any required source tests for PM_{10} since the last report.

22.3.3.2.7 Pursuant to compliance under Condition 5.3.2.2, for each month since the last report, show the 12-month PM_{10} mass emissions ending with that month. See example in Condition 22.3.3.2.2.

22.3.3.2.8 Pursuant to compliance under Conditions 5.4.1 results of any required source tests for SO_2 since the last report.

22.3.3.2.9 Pursuant to compliance under Condition 5.4.2, for each month since the last report, show the 12-month SO_2 mass emissions ending with that month. See example in Condition 22.3.3.2.2.

22.3.3.2.10 Pursuant to compliance under Condition 5.5.2.1results of any required source tests for VOCs since the last report.

22.3.3.2.11 Pursuant to compliance under Condition 5.5.2.2, for each month since the last report, show the 12-month VOC mass emissions ending with that month. See example in Condition 22.3.3.2.2.

22.3.3.3 Emissions from the planer mill bag house exhaust stack:

22.3.3.3.1 Pursuant to compliance under Condition 6.2.1, PM/PM_{10} emissions (gr PM/PM_{10}/dscft) since the last report.

22.3.3.3.2 Pursuant to compliance under Condition 6.2.2, for each month since the last report, show the 12-month total PM/PM_{10} mass emissions ending with that month. See example in Condition 22.3.3.2.2.

22.3.3.4 Emissions from the dry kilns:

22.3.3.4.1 Pursuant to compliance under Condition 7, for each month since the last report, show the 12-month total PM/PM_{10} mass emissions ending with that month. See example in Condition 22.3.3.2.2.

22.3.3.4.2 Pursuant to compliance under Condition 7.2.3, for each month since the last report, show the 12-month total VOC mass emissions ending with that month. See example in Condition 22.3.3.2.2.

22.3.3.5 Emissions from the anti-mold spray system: Pursuant to compliance under Condition 8.3, for each month since the last report, show the 12-month total VOC mass emissions ending with that month. See example in Condition 22.3.3.2.2.

22.3.3.6 The duration and nature of any CEMS down-time excluding zero and span checks.

22.3.3.7 Results of any CEMS audits or accuracy checks.

22.3.4 Each occurrence of monitored emissions measured in excess of the limits shall be reported in writing to Ecology and Northwest Clean Air Agency after the respective exceedance in accordance with WAC 173-400-107(3). Such reports shall, as a minimum, include:

22.3.4.1 The time of the occurrence.

22.3.4.2 Magnitude of excess from the emission limit.

22.3.4.3 The duration of the excess.

22.3.4.4 The probable cause.

22.3.4.5 Corrective actions taken or planned.

22.3.4.6 Any other agency contacted.

22.4 SPI will maintain monitoring, source test, CEM audit tests and process records:

22.4.1 At the Skagit County facility.

22.4.2 For at least five years.

22.4.3 Records of the times and quantity of natural gas used in the wood-fired cogeneration unit.

22.4.4 SPI will provide Ecology and Northwest Clean Air Agency with the monitoring and process records for any period within the five year archive, within ten working days of request.

Standard Requirements

23. SPI will provide safe access and sampling ports for source testing of the wood-fired cogeneration unit exhaust stack after the final pollution control device:

23.1 Safe access will consist of permanently constructed platforms on the stacks.

23.2 The sampling ports will meet the requirements of 40 CFR, Part 60, Appendix A. Method 1.

23.3 Other arrangements may be acceptable if approved by Ecology and Northwest Clean Air Agency prior to installation.

24. Operation and maintenance (O&M) manual for the facility:

24.1 Within 90 days of startup, SPI will identify operational parameters and practices for the planer mill bag house, dry kilns, anti-mold spray system, and wood-fired cogeneration unit.

24.2 The operational parameters and practices will constitute proper operation relative to compliance with the emission limitation conditions of this permit.

24.3 SPI will include these operational parameters and practices in the planer mill bag house, the dry kilns, the anti-mold spray system, and the wood-fired cogeneration unit O&M manuals. As a minimum, and to the extent they relate to the emission limitations specified in the conditions of this PSD permit, these will include:

24.3.1 Inspection and maintenance procedures and schedule.

24.3.2 Prescribed acceptable ranges for operation based on manufacturer recommendations.

24.3.3 Section specifying maintenance and calibration of all required monitors used to assure compliance with the terms and conditions of this PSD permit.

24.4 SPI will keep the operational parameters and practices in the O&M manuals up-to-date to reflect any modifications of the equipment or its operating procedures.

24.5 SPI will keep the O&M manuals readily available at the facility for review by state, federal and local agencies.

24.6 Within thirty days of request from Ecology, SPI shall submit the O&M manual to Ecology and Northwest Clean Air Agency for approval within the scope of Condition 24.2.

25. Nothing in this determination will be construed so as to relieve SPI of its obligations under any state, local, or federal laws or regulations.

26. Subject to RCW 70.94.200, SPI will permit the Environmental Protection Agency, state and local regulatory personnel access to the source upon request for the purposes of compliance assurance inspections.

27. This approval will become invalid:

27.1 If construction of the project is not commenced within eighteen (18) months after receipt of the final approval, or if construction of the facility is discontinued for a cumulative period of eighteen (18) months. Ecology may extend either 18-month period upon a satisfactory showing by SPI that an extension is justified, pursuant to 40 C.F.R. 52.21(r)(2) and applicable EPA guidance.

27.1.1 The extension request must be received by the Ecology prior to expiration of the permit.

27.1.2 The Best Available Control Technology (BACT) analysis and determination must be updated to current standards.

27.1.3 PSD increment consumption and air quality impacts must be reassessed to assure that interim source growth would not materially alter the conclusions made relative to the original permit decision.

27.1.4 The decision to extend the permit must be subjected to the same public review and comment procedures as applicable to the original permit.

28. The effective date of this permit shall not be earlier than the date upon which the USEPA notifies Ecology that the USEPA has satisfied its obligations, if any, under Section 7 of the Endangered Species Act 16 U.S.C. § 1531 et seq., 50 C.F.R. part 402, subpart B (Consultation Procedures) and Section 305(b)(2) of the Magnuson-Stevens Fishery and Conservation Act 16 U.S.C. § 1801 et seq., 50 C.F.R. part 600, subpart K (EFH Coordination, Consultation, and Recommendations).

29. For federal regulatory purposes and in accordance with 40 CFR 124.15 and 124.19: During the public review period for the preliminary determination, any public reviewer may submit a request for a change in any permit condition. If this occurs, the effective date of this permit shall not be earlier than 30 days after service of notice to the commenters and applicant of the final determination accompanied by the associated summary of responses to comments.

29.1 If a review of the final determination is requested under 40 CFR 124.19 within the 30-day period following the date of the final determination, the effective date of the

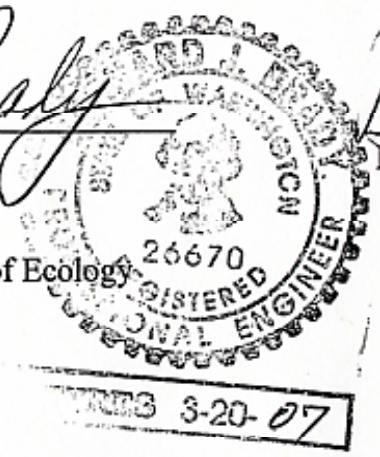
permit is suspended until such time as the review and any subsequent appeal against the permit are resolved.

29.2 If there was no public comment requesting a change in the preliminary determination or a proposed permit condition during the public review and comment period, this permit is effective upon the date of finalization subject to consideration of Condition 28 (EPA's ESA requirement) above.

Reviewed by:

Bernard Brady December 13, 2005

Bernard Brady, P.E. Date
Technical Services Section
Air Quality Program
Washington State Department of Ecology



3-20-07

Approved by:

12/14/05

Stuart A. Clark, Program Manger Date
Air Quality Program
Washington State Department of Ecology

Ecology was notified by the USEPA that the USEPA has satisfied its obligations under the Endangered Species and Magnuson-Stevens Acts relative to this PSD permit on:

1/25/06

Date of USEPA notification

Stuart A. Clark, Program Manager
Air Quality Program
Washington State Department of Ecology